

I claim:

1. A device for coupling light into an optical conductor having a light receiving surface onto which light can be projected, the device comprising:

an optical light element for generating the light, said optical light element containing:

a light-guiding body functioning as a housing having a luminous surface, said luminous surface having a coupling region corresponding directly to the light receiving surface of the optical conductor and being free of additional optical elements;

a reflector having a reflecting surface for focusing the light onto at least one of said coupling region of said luminous surface of said housing and the light receiving surface of the optical conductor;

electric terminals for supplying power and disposed in said housing; and

a photoelectric material disposed in said reflector and connected to said electric terminals, said photoelectric material generating the light.

2. An optical device, comprising:

an optical conductor having a light receiving surface onto which light can be projected; and

an optical light element for generating the light transmitted to said optical conductor, said optical light element containing:

a light-guiding body functioning as a housing having a luminous surface, said luminous surface having a coupling region corresponding directly to said light receiving surface of said optical conductor and being free of additional optical elements;

a reflector having a reflecting surface for focusing the light onto at least one of said coupling region of said luminous surface of said housing and said light receiving surface of said optical conductor;

electric terminals for supplying power and disposed in said housing; and

a photoelectric material disposed in said reflector and connected to said electric terminals, said photoelectric material generating the light.

3. The device according to claim 2, wherein said reflecting surface of said reflector has a geometry by which the light emitted by said photoelectric material is projected at a predetermined angle onto at least one of said coupling region of said luminous surface and said light receiving surface of said optical conductor.

4. The device according to claim 2, wherein said reflecting surface of said reflector has a shape selected from the group of a parabolic shape and an elliptic shape.

5. The device according to claim 2, wherein:

said reflector has an opening formed therein;

said coupling region forms a substantially flat area corresponding to said opening of said reflector; and

said light receiving surface of said optical conductor is disposed in a plane-parallel fashion relative to said coupling region.

6. The device according to claim 2, wherein said optical conductor has at least one optical fiber.

7. The device according to claim 2, wherein said optical conductor has a given diameter corresponding to an area of said coupling region.

8. The device according to claim 2, wherein said optical light element for generating the light is a light-emitting diode.

9. The device according to claim 6, wherein said optical fiber is formed from a material selected from the group consisting of glass and plastic.

10. The device according to claim 3, wherein said predetermined angle is an angle that is most favorable optically for reception in said optical conductor.

11. A light-emitting diode for use in an optical device, comprising:

a base having electric terminals and configured in an illuminating direction as a reflector having a reflecting surface and a base rim bounding said reflecting surface;

a photoelectric material disposed in said reflector and connected to said electric terminals; and

an optically conducting body functioning as a housing connected to said base, said housing having a luminous surface and surrounding said photoelectric material, said luminous surface having a coupling region constructed at a smallest possible distance from said base rim.

12. The light-emitting diode according to claim 11, wherein said reflector has an opening formed therein and said coupling region is a flat area disposed parallel to said opening.